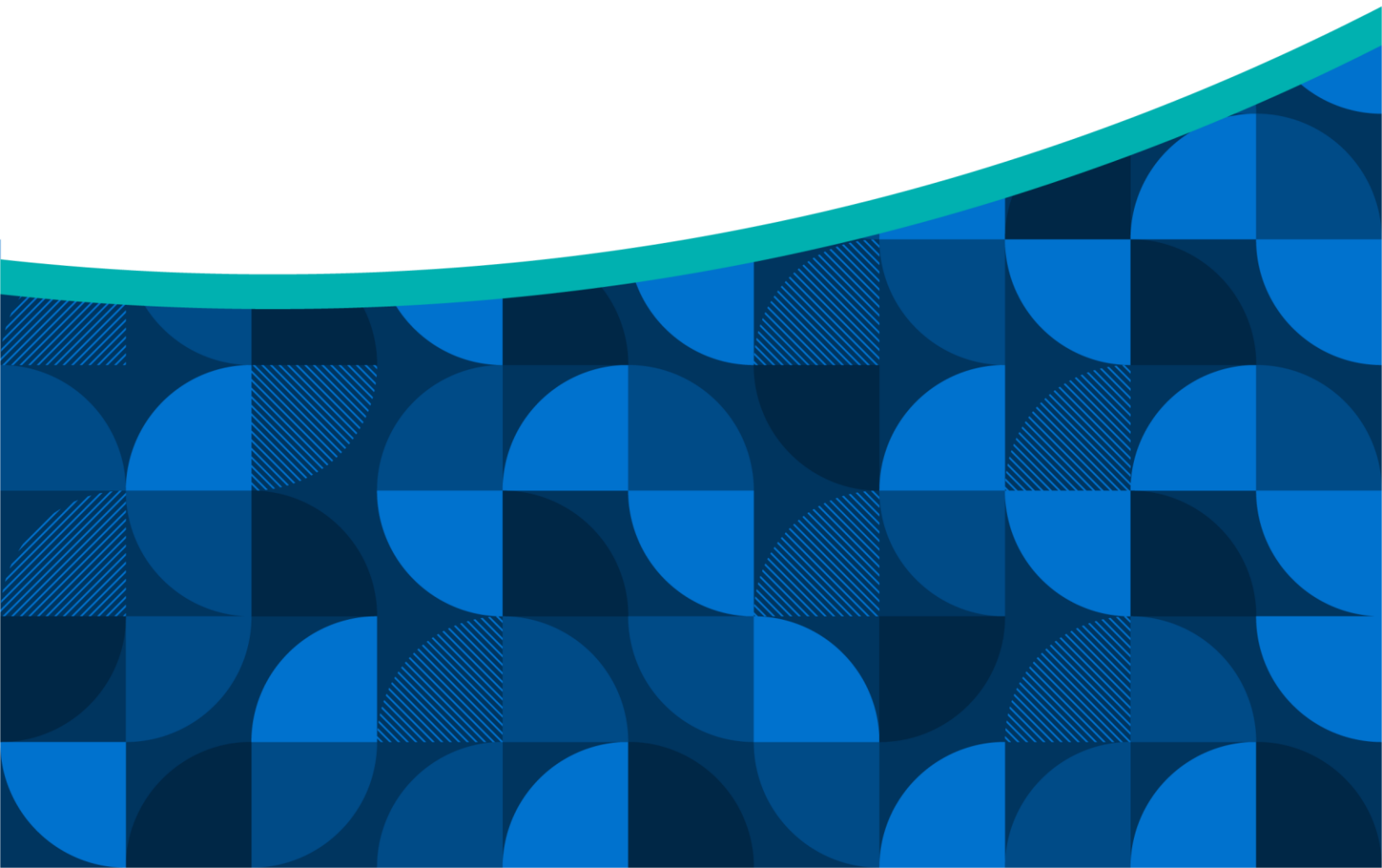




EAB MARKET INSIGHTS

# **New Nondegree Undergraduate-Level Program Opportunities**

William Paterson University  
May 2023



Research Associate

Juliana Mosqueira Villegas

Senior Research Manager

Hailey Blain

#### Legal Caveat

EAB Global, Inc. ("EAB") has made efforts to verify the accuracy of the information it provides to partners. This report relies on data obtained from many sources, however, and EAB cannot guarantee the accuracy of the information provided or any analysis based thereon. In addition, neither EAB nor any of its affiliates (each, an "EAB Organization") is in the business of giving legal, accounting, or other professional advice, and its reports should not be construed as professional advice. In particular, partners should not rely on any legal commentary in this report as a basis for action, or assume that any tactics described herein would be permitted by applicable law or appropriate for a given partner's situation. Partners are advised to consult with appropriate professionals concerning legal, tax, or accounting issues, before implementing any of these tactics. No EAB Organization or any of its respective officers, directors, employees, or agents shall be liable for any claims, liabilities, or expenses relating to (a) any errors or omissions in this report, whether caused by any EAB Organization, or any of their respective employees or agents, or sources or other third parties, (b) any recommendation by any EAB Organization, or (c) failure of partner and its employees and agents to abide by the terms set forth herein.

EAB is a registered trademark of EAB Global, Inc. in the United States and other countries. Partners are not permitted to use these trademarks, or any other trademark, product name, service name, trade name, and logo of any EAB Organization without prior written consent of EAB. Other trademarks, product names, service names, trade names, and logos used within these pages are the property of their respective holders. Use of other company trademarks, product names, service names, trade names, and logos or images of the same does not necessarily constitute (a) an endorsement by such company of an EAB Organization and its products and services, or (b) an endorsement of the company or its products or services by an EAB Organization. No EAB Organization is affiliated with any such company.

#### **IMPORTANT: Please read the following.**

EAB has prepared this report for the exclusive use of its partners. Each partner acknowledges and agrees that this report and the information contained herein (collectively, the "Report") are confidential and proprietary to EAB. By accepting delivery of this Report, each partner agrees to abide by the terms as stated herein, including the following:

1. All right, title, and interest in and to this Report is owned by an EAB Organization. Except as stated herein, no right, license, permission, or interest of any kind in this Report is intended to be given, transferred to, or acquired by a partner. Each partner is authorized to use this Report only to the extent expressly authorized herein.
2. Each partner shall not sell, license, republish, distribute, or post online or otherwise this Report, in part or in whole. Each partner shall not disseminate or permit the use of, and shall take reasonable precautions to prevent such dissemination or use of, this Report by (a) any of its employees and agents (except as stated below), or (b) any third party.
3. Each partner may make this Report available solely to those of its employees and agents who (a) are registered for the workshop or program of which this Report is a part, (b) require access to this Report in order to learn from the information described herein, and (c) agree not to disclose this Report to other employees or agents or any third party. Each partner shall use, and shall ensure that its employees and agents use, this Report for its internal use only. Each partner may make a limited number of copies, solely as adequate for use by its employees and agents in accordance with the terms herein.
4. Each partner shall not remove from this Report any confidential markings, copyright notices, and/or other similar indicia herein.
5. Each partner is responsible for any breach of its obligations as stated herein by any of its employees or agents.
6. If a partner is unwilling to abide by any of the foregoing obligations, then such partner shall promptly return this Report and all copies thereof to EAB.

# Table of Contents

---

<b>I. Key Findings.</b> . . . . .	4
<b>II. Analysis of New Program Opportunities.</b> . . . . .	7
Computer Technology & Support . . . . .	7
Health Care Para-Professionals . . . . .	9
Social Services . . . . .	11
<b>Appendix: Project Methodology.</b> . . . . .	13

# Key Findings: Computer Technology & Support Vertical

## Research Challenge

William Paterson University requested a Market Opportunity Scan to identify opportunities for new nondegree program development.

A detailed research methodology appears in [Appendix B](#).

## Research Parameters

- Region: New Jersey, New York, and Pennsylvania
- Level of labor market analysis: associate's- and bachelor's-level combined
- Partner-selected industry verticals:
  - **Computer Technology & Support,**
  - **Health Care Para-Professionals, and**
  - **Social Services.**

## Recommended Next Steps

As this analysis focuses exclusively on labor market data, EAB recommends analysis of the competitive landscape prior to program launch.

Reach out to your Strategic Leader to request a Program Feasibility Study for an in-depth assessment of a program of interest.

## Computer Technology & Support Vertical

Within the Computer Technology & Support vertical, analysis suggests high demand for associate's- and bachelor's-level professionals with skills in:

- **Software:** "software installation," "software development," and "issue tracking."
- **Project Management:** "project management," "agile methodology," and "workflow management."
- **Customer Technology and Desktop Support:** "customer relationship management," "customer support," "desktop support," "help desk support," "technical support," "IT service management," and "end-user training and support."
- **Network:** "firewall," "automation," "local area networks," "Virtual Private Networks (VPN)," "network troubleshooting," and "wide area network."
- **Microsoft Windows:** "Microsoft Windows 7," "Microsoft Windows 10," "Windows Sever," and "Microsoft Office 360."
- **Cloud Computing:** "Microsoft Azure" and "Amazon Web Service."
- **Programming Language:** "SQL (programming language)" and "Java (programming language)."
- **Operating Systems:** "operating systems" and "Linux."
- **Computer Hardware:** "computer hardware" and "peripheral devices."
- **Data Analysis:** "data analysis."

Computer hardware skills such as computer hardware and peripheral devices (requested in 6,277 and 6,024 job postings, respectively) and network skills such as automation and local area networks (requested in 4,537 and 4,149 job postings, respectively) were increasingly requested by employers across the analyzed 36-month period. Consider incorporating these skills into new nondegree programs to meet employer demand. William Paterson University could draw from the existing [Minor in Computer Information Systems](#) to meet employer demand. Relevant courses include Fundamentals of Computer Hardware and Fundamentals of Computer Networking.

Across the analyzed 36-month period, operating systems skills (operating systems and Linux); programming languages skills (SQL and Java); and cloud computing skills (Microsoft Azure and Amazon Web Service) were highly requested by employers. William Paterson University could reduce program launch costs by drawing on curricular and faculty overlap via the [Bachelor's in Computer Science](#). Relevant courses include Operating Systems, Systems Programming, Programming Language, and Cloud Computing.

Employers commonly requested technology and desktop support skills. Consider incorporating courses relevant to these skills when launching a new program.

# Key Findings: Health Care Para-Professional Vertical

---

## *Health Care Para-Professional Vertical*

Employers advertising associate's- and bachelor's-level positions categorized under the Health Care Para-Professional vertical demonstrated strong demand for the following skills:

- **Patient Care:** "nursing care," "direct patient care," "patient assistance," "patient safety," "ethical standards and conduct," "patient preparation," and "patient education and counseling."
- **Medical Office Administration:** "setting appointment," "billing," "medical office procedures," and "workflow management."
- **Treatment Planning:** "treatment planning," "medical prescription," and "medication administration."
- **Medical Records:** "medical records," "electronic medical record," and "medical history documentation."
- **Medical Assistance:** "medical assistance" and "certified medical assistant (CMA)."
- **Cardiopulmonary Resuscitation:** "Cardiopulmonary Resuscitation (CPR)."
- **Electrocardiography:** "electrocardiography."
- **Nursing:** "nursing," "Registered Nurse (RN)," "Licensed Practical Nurse (LPR)," "nursing care," and "Licensed Vocational Nurse (LVN)."
- **Rehabilitation:** "rehabilitation."
- **Long-term Care:** "long-term care" and "home health care."
- **Geriatrics:** "geriatrics" and "nursing homes."
- **Phlebotomy:** "phlebotomy" and "laboratory testing."

William Paterson University currently confers health care para-professional skills employers are seeking through the existing [Certificate in Medical Assistant](#). These skills include administration, cardiopulmonary resuscitation, and medical records. This certificate encompasses topics such as clinical office procedures, billing, medical data entry, cardiopulmonary resuscitation, and electrocardiography. Utilize coursework and faculty from this program to reduce program launch costs.

Other relevant skills William Paterson University confer includes rehabilitation and Cardiopulmonary Resuscitation within the [Bachelor's in Exercise Science](#); patient care skills within the [Patient Care Technician Certificate Training Program](#); electrocardiography skills within the [EKG Technician Certificate](#); and phlebotomy skills within the [Phlebotomy Technician Program](#).

Employers commonly requested long-term care and geriatrics skills such as home health care, geriatrics, and nursing homes. Consider incorporating courses relevant to these skills when launching a new program.

# Key Findings: Social Services Vertical

---

## *Social Services Vertical*

Within the Social Services vertical, analysis suggests high demand for associate's- and bachelor's-level professionals with skills in:

- **Human Services:** "social work" and "human services."
- **Record Keeping:** "record keeping" and "electronic medical record."
- **Mental Health:** "mental diseases," "behavioral health," "mental health," and "psychology."
- **Substance Abuse:** "substance abuse."
- **Administration:** "billing," "data entry," "data collection," "discharge planning," and "record keeping."
- **Care Management:** "care management," "care coordination," "long-term care," "client services," "integrated care," "trauma care," and "home health care."
- **Treatment Planning:** "treatment planning" and "program development."
- **Working with Children:** "child development," "working with children," and "child welfare."
- **Disabilities:** "development disabilities" and "disabilities."
- **Case Management:** "case management."
- **Sociology:** "sociology."
- **Bilingual Social Services:** "bilingual (Spanish/English)."
- **Community Health:** "community health" and "community outreach."
- **Program Development:** "program development."

William Paterson University could reduce program launch costs by drawing on curricular overlap via the [Certificate in Behavioral and Social Science Research Skills](#). Relevant courses includes Experimental Psychology.

Employers commonly requested children development, human services, and substance abuse skills. William Paterson University confers these skills within the [Bachelor's in Social Work](#) curriculum. Utilize relevant coursework such as Social Welfare Policy, Psychopathology and Well-Being, Human Behavior and Social Environment, Social Work Research, and Drugs and Health to reduce program launch costs.

William Paterson University confers sociology through the existing [Bachelor's in Sociology-Social Services](#). The program primarily focuses on different aspects of sociology. Utilize coursework from this program to reduce program launch costs.

Consider adding courses relevant to treatment planning and case management skills when launching a new program to meet employer demand.

# Analysis of New Program Opportunities

## Analysis of Job Postings' Skill Requirements for Associate's- and Bachelor's-Level Computer Technology & Support Professionals

### Fundamental and Emerging Skills for Associate's- and Bachelor's-Level Computer Technology & Support Professionals

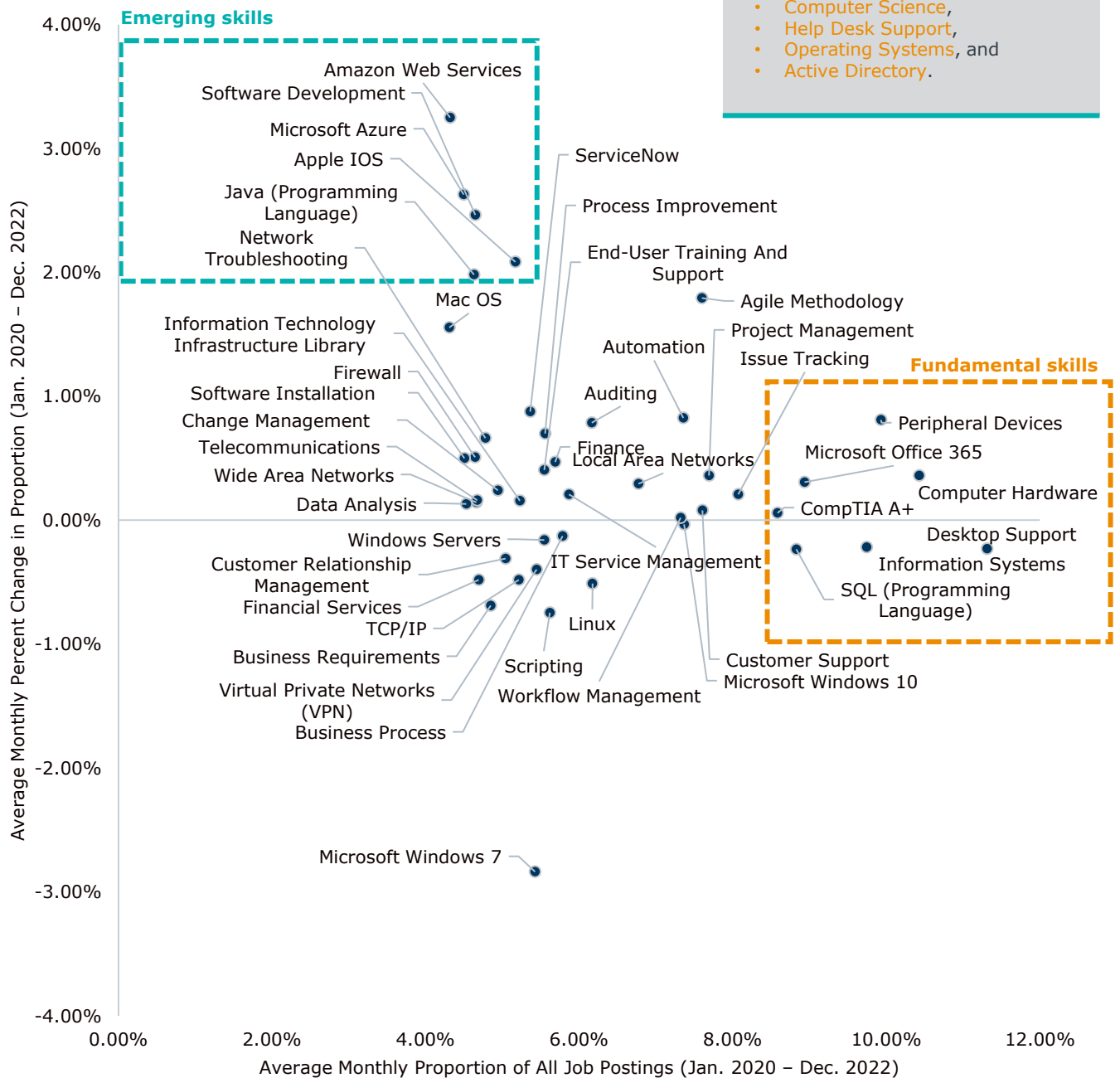
January 2020 – December 2022, Regional Data

n = 59,985 job postings

The Forum excluded the following skills from the plot to improve readability.

Skills highlighted in orange ranked at or above 14.22% proportion of all postings:

- Technical Support,
- Computer Science,
- Help Desk Support,
- Operating Systems, and
- Active Directory.



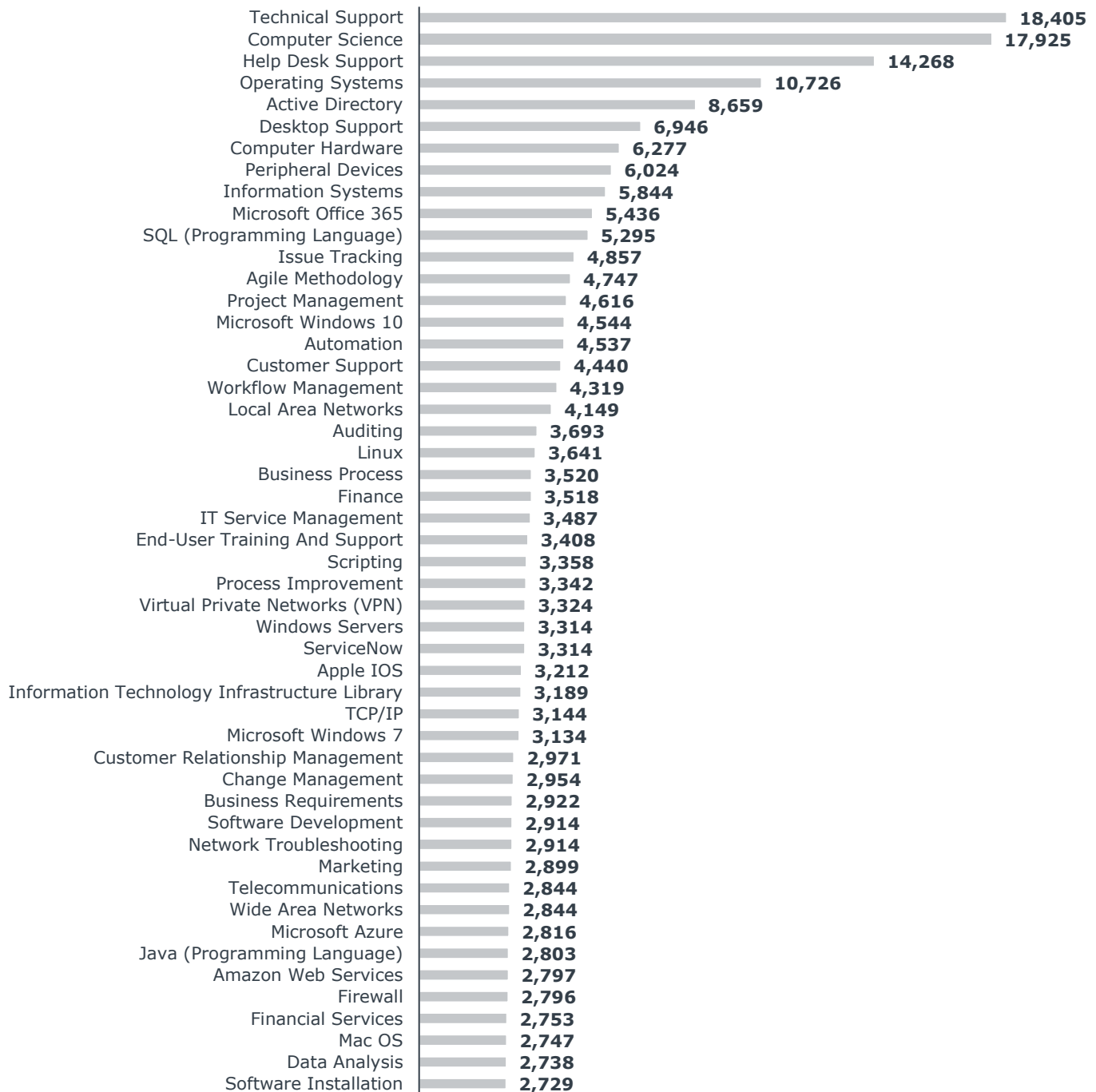
## Analysis of Job Postings’ Skill Requirements for Associate’s- and Bachelor’s-Level Computer Technology & Support Professionals

The graphic below shows the 50 most requested specialized skills appearing in job postings for associate’s- and bachelor’s-level computer technology & support professionals from January 2020 to December 2022.

### In-Demand Specialized Skills for Associate’s- and Bachelor’s-Level Computer Technology & Support Professionals

January 2020 – December 2022, Regional Data

n = 59,985 job postings



Source: EAB analysis; Lightcast



# Analysis of Job Postings' Skill Requirements for Associate's- and Bachelor's-Level Health Care Para-Professionals

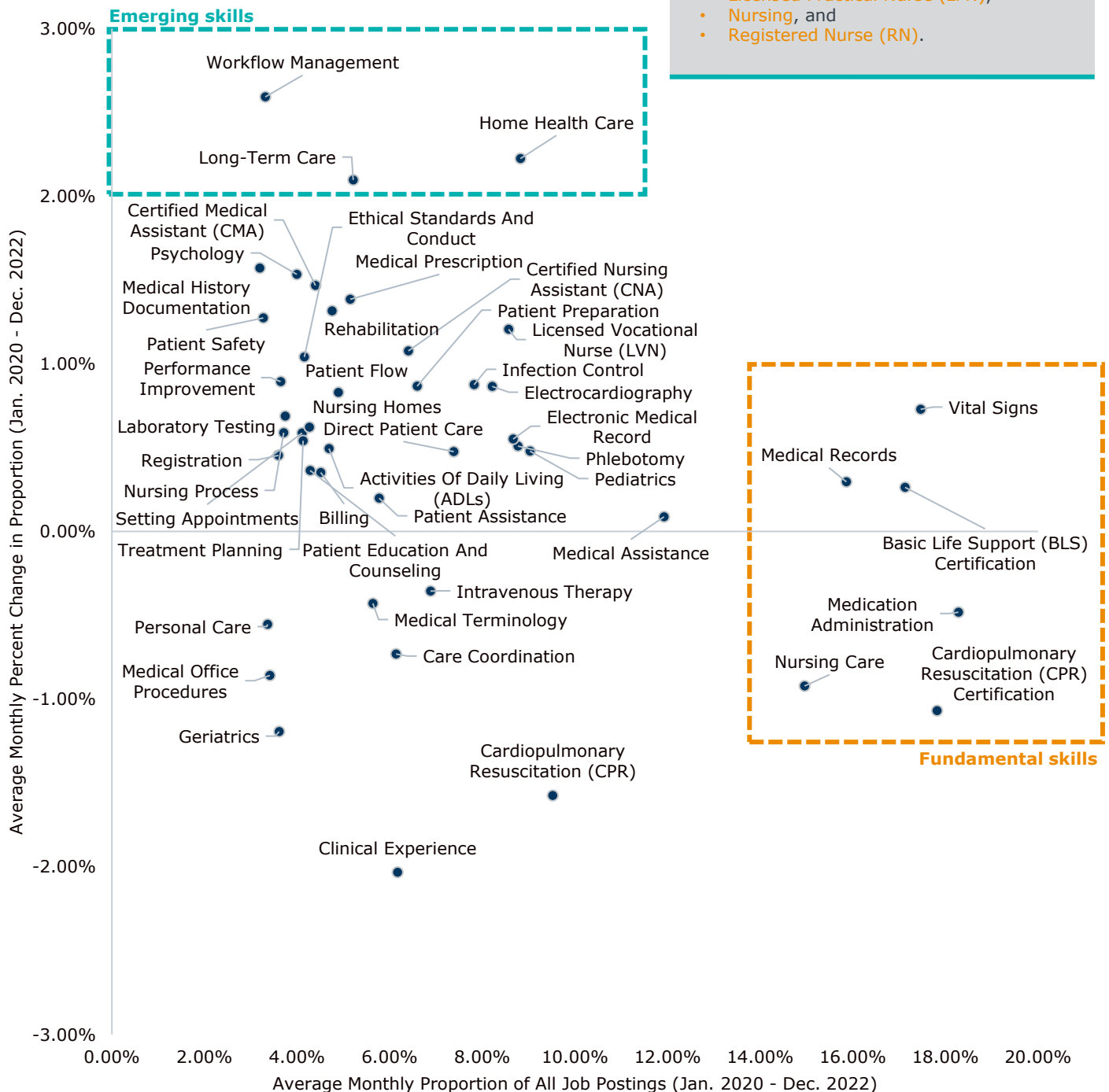
## Fundamental and Emerging Skills for Associate's- and Bachelor's-Level Health Care Para-Professionals

January 2020 – December 2022, Regional Data

n = 232,970 job postings

The Forum excluded the following skills from the plot to improve readability. Skills highlighted in orange ranked at or above 28.07% proportion of all postings:

- Licensed Practical Nurse (LPN),
- Nursing, and
- Registered Nurse (RN).



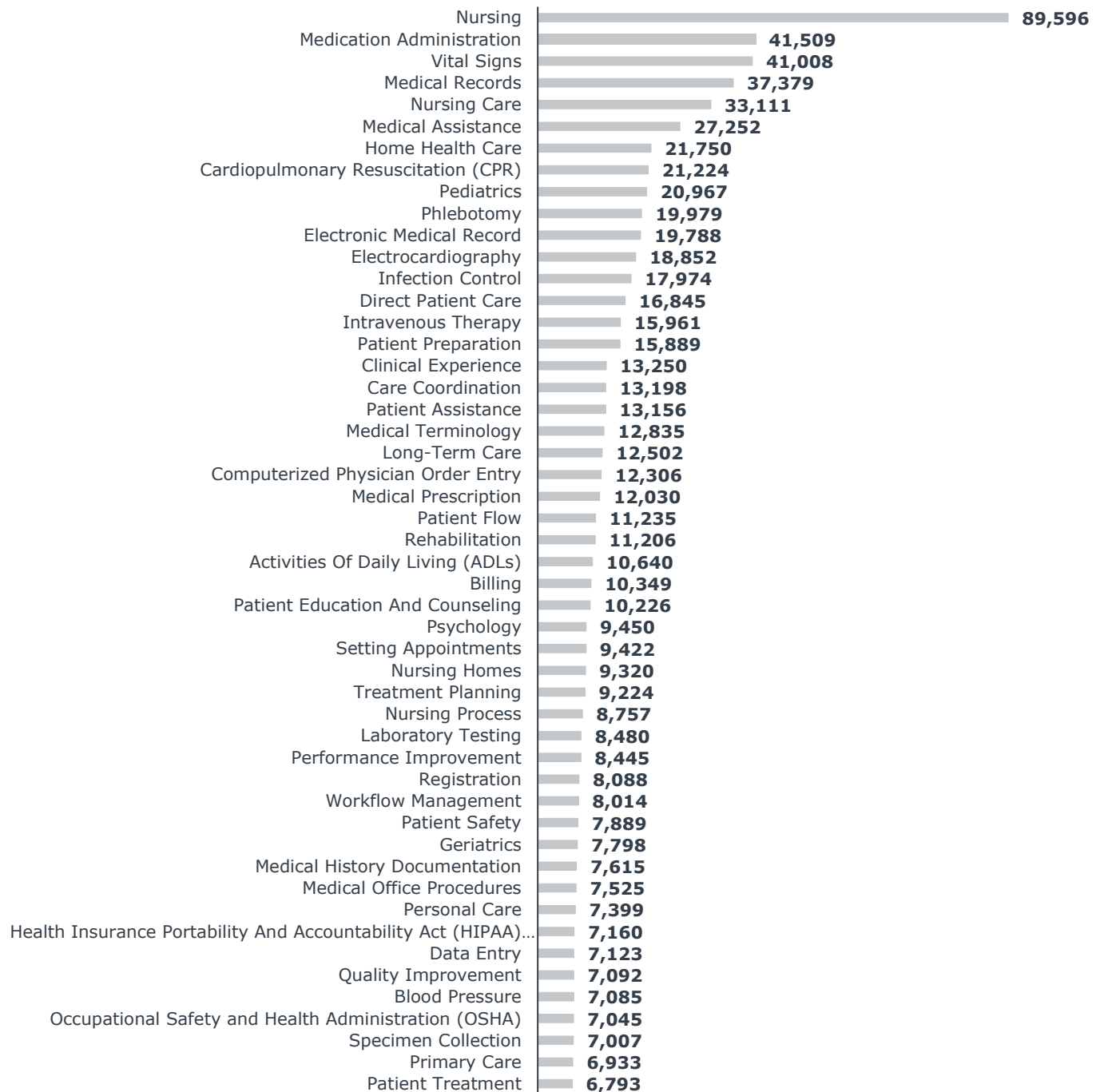
## Analysis of Job Postings’ Skill Requirements for Associate’s- and Bachelor’s-Level Health Care Para-Professionals

The graphic below shows the 50 most requested specialized skills appearing in job postings for associate’s- and bachelor’s-level health care para-professionals from January 2020 to December 2022.

### In-Demand Specialized Skills for Associate’s- and Bachelor’s-Level Health Care Para-Professionals

January 2020 – December 2022, Regional Data

n = 232,970 job postings



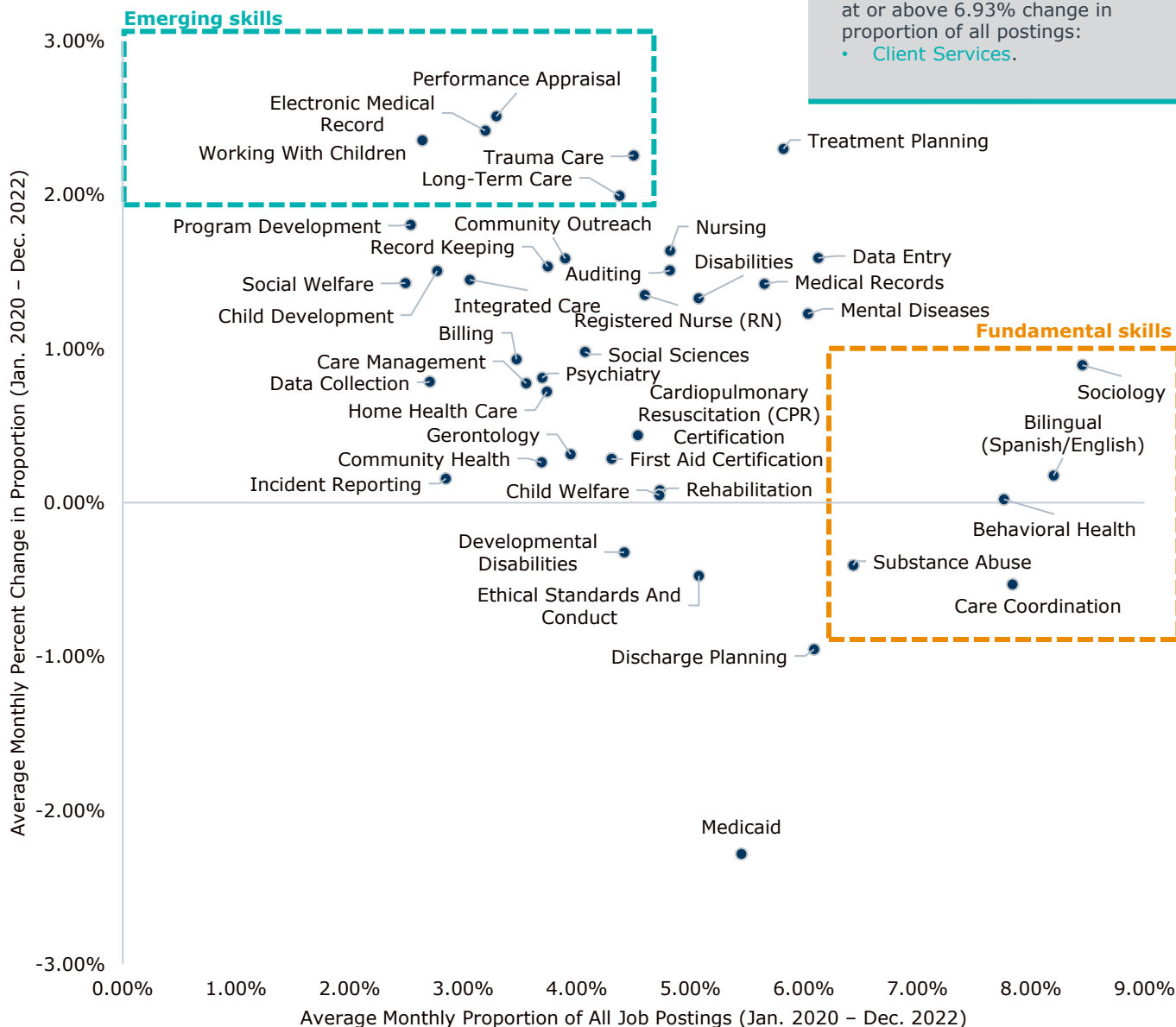
## Analysis of Job Postings' Skill Requirements for Associate's- and Bachelor's-Level Social Service Professionals

### Fundamental and Emerging Skills for Associates'- and Bachelor's-Level Social Service Professionals

January 2020 – December 2022, Regional Data

n = 21,722 job postings

The Forum excluded the following skills from the plot to improve readability.  
 Skills highlighted in orange ranked at or above 11.02% proportion of all postings:  
 • Social Work,  
 • Human Services,  
 • Case Management,  
 • Mental Health,  
 • Psychology, and  
 • Crisis Intervention.  
 Skills highlighted in teal ranked at or above 6.93% change in proportion of all postings:  
 • Client Services.



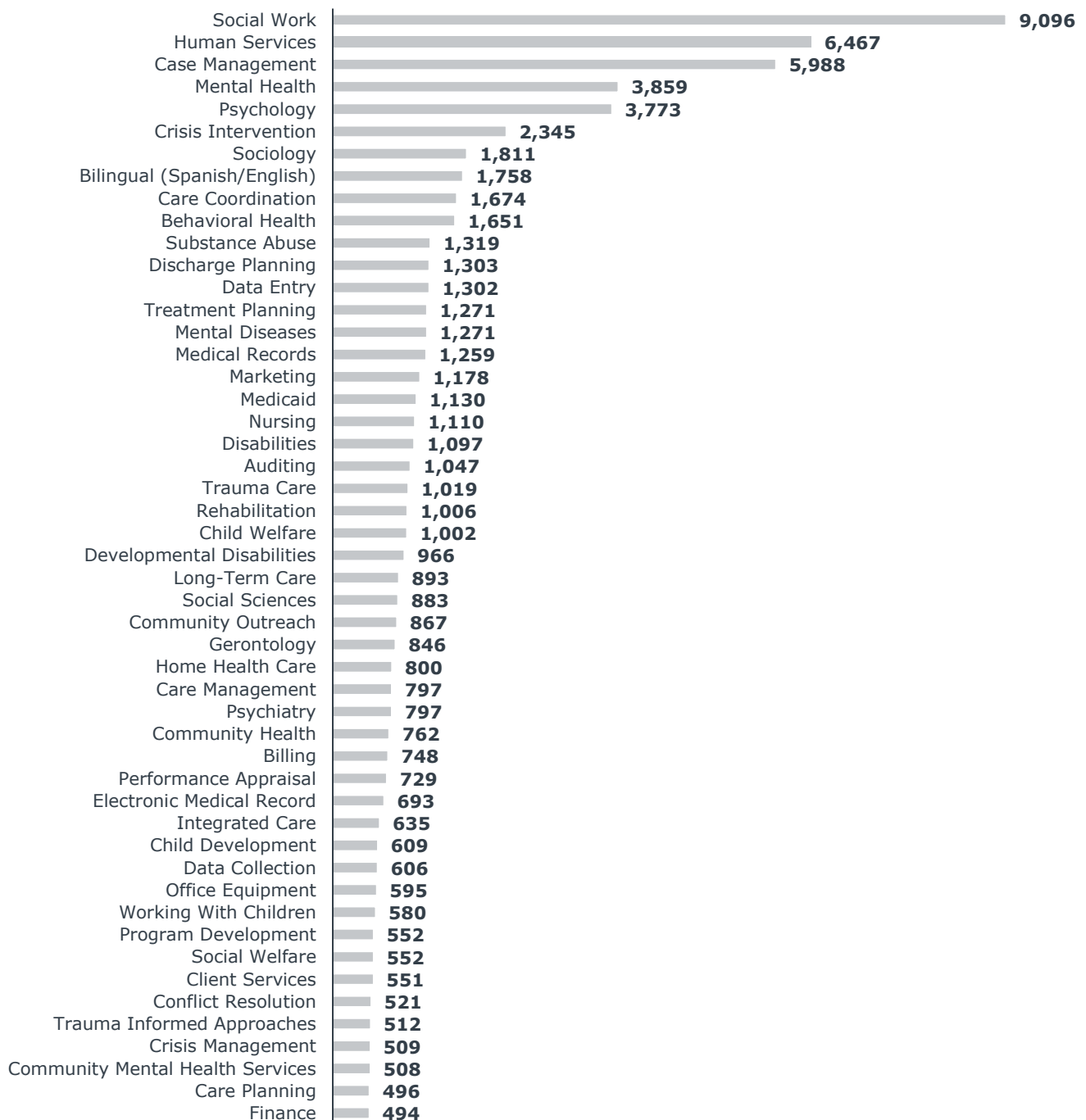
## Analysis of Job Postings’ Skill Requirements for Associate’s- and Bachelor’s-Level Social Service Professionals

The graphic below shows the 50 most requested specialized skills appearing in job postings for associate’s- and bachelor’s-level social service professionals from January 2020 to December 2022.

### In-Demand Specialized Skills for Associates’- and Bachelor’s-Level Social Service Professionals

January 2020 – December 2022, Regional Data

n = 21,722 job postings



# Appendix A: Assessment of Verticals for New Nondegree Undergraduate-Level Program Development

## Verticals with Strong Labor Markets

### Favorable Verticals<sup>1</sup>



#### **Computer and Technology Support**

##### *High Demand Occupations:*

- Computer and Information Systems Managers (4.13)
- Web and Digital Interface Designers (3.70)
- Audio and Video Technicians (3.50)
- Computer User Support Specialists (3.49)
- Computer Numerically Controlled Tool Programmers (3.48)
- Computer Network Support Specialists (3.42)

#### **Considerations:**

- High and moderate average monthly job postings across quarters for “Computer User Support Specialists” and “Computer and Information Systems Managers” (i.e., 3,283 and 706 postings, respectively) suggest plentiful employment opportunities within this vertical.
- High actual projected employment growth of “Computer and Information Systems Managers” from 2023 to 2033 (i.e., 9,999 postings) indicates a growing labor market.
- The Bureau of Labor Statistics predicts that high employment growth for “[Computer User Support Specialists](#)” will continue to rise as technical help and training is needed by software and hardware users. However, demand may be offset by the ongoing development of automation tools. Additionally, the BLS predicts continuous demand for “[Web and Digital Interface Designers](#)” due to rises in e-commerce.
- Leverage existing resources from the [bachelor’s-level computer science program](#) and the [computer information systems minor](#) to aid in program development.



#### **Early Childhood Education**

##### *High Demand Occupations:*

- Preschool Teachers, Except Special Education (4.21)
- Education and Childcare Administrators, Preschool and Daycare (3.96)

#### **Considerations:**

- High average monthly job postings across quarters for “Preschool Teachers, Except Special Education” (i.e., 2,335 postings) suggest ample job opportunities in this vertical.
- High actual projected employment growth of “Preschool Teachers, Except Special Education” from 2023 to 2033 (i.e., 11,131 postings) indicate growing employer demand in this vertical.
- The BLS predicts employment growth for “[Preschool Teachers, Except Special Education](#)” and “[Education and Childcare Administrators, Preschool and Daycare](#)” will continue to rise across the next decade following the COVID-19 recession of 2020.
- Utilize curriculum from the [bachelor’s-level early childhood education program](#) and [bachelor’s-level early childhood education program for paraprofessionals](#) to develop nondegree level certificates and programs to expand the institution’s portfolio in this vertical.

1) Verticals are presented in alphabetical order, not in order of favorability.

# Report Findings (cont.)

## Favorable Verticals<sup>1</sup>



### **Health Care Para-Professional**

#### *High Demand Occupations:*

- Medical Assistants (4.38)
- Physical Therapist Assistants (4.26)
- Licensed Practical and Licensed Vocational Nurses (4.06)
- Physical Therapist Aides (3.96)
- Dental Hygienists (3.91)
- Nursing Assistants (3.87)
- Health Technologists and Technicians, All Other (3.85)
- Ophthalmic Medical Technicians (3.85)
- Pharmacy Technicians (3.83)
- Psychiatric Technicians (3.80)
- Respiratory Therapists (3.76)
- Diagnostic Medical Sonographers (3.76)
- Occupational Therapy Assistants (3.73)
- Medical Secretaries and Administrative Assistants (3.72)
- Veterinary Technologists and Technicians (3.72)

#### **Considerations:**

- “Licensed Practical and Licensed Vocational Nurses” saw the highest average monthly job postings (i.e., 10,410 postings) across quarters of all high-demand occupations identified within this report, suggesting strong employer demand.
- Five occupations have over 15% projected growth in employment from 2023 to 2033 (e.g., “Medical Assistants,” “Physical Therapist Assistants,” “Occupational Therapy Assistants”) which suggests rising employment opportunities for relevant professionals.
- The BLS attributes high employment growth of both “[Medical Assistants](#)” and “[Nursing Assistants](#)” to the aging population requiring increased medical assistance and staff.
- While William Paterson University offers several relevant health care certificates (e.g., [Pharmacy Technician Certificate](#), [Dental Assistant Certificate](#), [Medical Assistant Certificate](#)), build on existing institutional strength to expand nondegree offerings to align with existing majors such as the [bachelor’s-level exercise science program](#) and [bachelor’s-level biology-pre medical professional program](#).



### **K-12 Education and Administration**

#### *High Demand Occupations:*

- Education Administrators, Postsecondary (4.12)
- Teachers and Instructors, All Other (4.09)
- Teaching Assistants, Except Postsecondary (3.76)
- Middle School Teachers, Except Special and Career/Technical Education (3.69)
- Elementary School Teachers, Except Special Education (3.61)
- Secondary School Teachers, Except Special and Career/Technical Education (3.51)
- Kindergarten Teachers, Except Special Education (3.09)

#### **Considerations:**

- Moderate-to-high average monthly job postings across quarters for “Education Administrators, Postsecondary,” “Middle School Teachers, Except Special and Career/Technical Education,” and “Teaching Assistants, Except Postsecondary” (i.e., 1,925; 1,554; and 1,108 postings, respectively) suggest employer demand within this vertical.
- Moderate-to-high actual projected growth among the occupations “Teaching Assistants, Except Postsecondary,” “Elementary School Teachers, Except Special Education,” and “Secondary School Teachers, Except Special and Career/Technical Education” (i.e., 12,594; 10,230; and 7,822 postings, respectively) suggests growing opportunities for relevant professionals.
- Utilize resources from the [bachelor’s-level elementary education program](#) to lower startup costs for new nondegree programs.

1) Verticals are presented in alphabetical order, not in order of favorability.

# Report Findings (cont.)

---

## Favorable Verticals<sup>1</sup>

---



### **Operations Management**

#### *High Demand Occupations:*

- General and Operations Managers (3.90)
- Logisticians (3.87)
- Transportation, Storage, and Distribution Managers (3.66)

#### **Considerations:**

- High average monthly job postings across quarters for “General and Operations Managers,” “Transportation, Storage, and Distribution Managers,” and “Logisticians” (i.e., 7,103; 1,607; and 1,151 postings, respectively) suggests high employer demand within the operations management vertical.
- “General and Operations Managers” is the occupation with highest projected actual growth in employment across the next decade of all high-demand occupations identified within this report (i.e., 27,364 postings), suggesting plentiful employment opportunities for professionals.
- The Bureau of Labor Statistics (BLS) attributes the high projected growth for “[Logisticians](#)” to employers’ need for professionals who can organize increasingly complex deliveries as e-commerce expands.
- Use resources from the existing [bachelor’s-level management program](#) reduce certificate launch costs.



### **Social Services**

#### *High Demand Occupations:*

- Social and Community Service Managers (4.10)
- Social and Human Service Assistants (3.86)
- Community Health Workers (3.51)

#### **Considerations:**

- Occupations for social services saw moderate average monthly job postings across quarters for “Social and Human Service Assistants” and “Social and Community Service Managers” (i.e., 880 and 796), suggesting modest employer demand within this vertical.
- However, projected growth in employment between 2023 and 2033 for identified social services occupations ranges from 10.55% to 14.28%, suggesting moderate growth in relevant employment in the next decade.
- The BLS indicates that growth for “[Social and Community Service Managers](#)” and “[Social and Human Service Assistants](#)” is attributed to the aging population and health services need. Additionally, the BLS expects demand for “[Community Health Workers](#)” to rise over the next decade as health promotion grows following the COVID-19 pandemic.
- While existing resources to fulfill high demand occupations can be found in the [behavioral and social science research skills certificate](#), utilizing resources from the [bachelor of social work program](#) and [bachelor’s-level sociology-social services program](#) can reduce additional program launch costs.

1) Verticals are presented in alphabetical order, not in order of favorability.

# Labor Market Analysis

Professionals Within These Occupations Should Encounter Strong Labor Markets

## Labor Market Data for High Demand Occupations in Favorable Industry Verticals

Regional Data

Occupation	Job Postings, 2020 Q1 - 2022 Q4			Employment, 2023-2033		Labor Market Score (Out of a maximum of 5)
	Avg. Monthly Job Postings Across Quarters <sup>1</sup>	Avg. Monthly Growth Across Quarters (Percent)	Avg. Quarterly Growth Across Quarters (Actual)	Projected Growth (Percent)	Projected Growth (Actual)	
<b>Computer and Technology Support</b>						
Computer and Information Systems Managers	706	5.52%	31	14.08%	9,999	<b>4.13</b>
Web and Digital Interface Designers	209	4.18%	4	18.59%	2,364	<b>3.70</b>
Audio and Video Technicians	90	4.89%	2	17.01%	1,495	<b>3.50</b>
Computer User Support Specialists	3,283	1.07%	7	7.01%	5,961	<b>3.49</b>
Computer Numerically Controlled Tool Programmers	37	9.16%	2	17.37%	458	<b>3.48</b>
Computer Network Support Specialists	330	3.74%	9	7.32%	1,713	<b>3.42</b>
<b>Early Childhood Education</b>						
Preschool Teachers, Except Special Education	2,335	4.36%	22	18.70%	11,131	<b>4.21</b>
Education and Childcare Administrators, Preschool and Daycare	352	8.91%	18	12.87%	1,134	<b>3.96</b>

1) To understand demand trends without single-month outliers over-influencing the data, this calculation considers the average number of monthly job postings in each quarter, then provides the average value across those quarters.



## Labor Market Analysis (cont.)

Professionals Within These Occupations Should Encounter Strong Labor Markets

### Labor Market Data for High Demand Occupations in Favorable Industry Verticals

Regional Data

Occupation	Job Postings, 2020 Q1 - 2022 Q4			Employment, 2023-2033		Labor Market Score (Out of a maximum of 5)
	Avg. Monthly Job Postings Across Quarters <sup>1</sup>	Avg. Monthly Growth Across Quarters (Percent)	Avg. Quarterly Growth Across Quarters (Actual)	Projected Growth (Percent)	Projected Growth (Actual)	
<b>Health Care Para-Professional</b>						
Medical Assistants	1,998	6.64%	76	16.62%	13,239	<b>4.38</b>
Physical Therapist Assistants	211	11.54%	17	28.34%	3,314	<b>4.26</b>
Licensed Practical and Licensed Vocational Nurses	10,410	4.24%	353	9.09%	8,637	<b>4.06</b>
Physical Therapist Aides	53	28.15%	5	15.72%	1,400	<b>3.96</b>
Dental Hygienists	144	20.50%	3	9.68%	2,533	<b>3.91</b>
Nursing Assistants	1,296	5.57%	59	5.56%	10,408	<b>3.87</b>
Health Technologists and Technicians, All Other	2,022	4.63%	78	9.08%	1,330	<b>3.85</b>
Ophthalmic Medical Technicians	72	18.62%	5	12.24%	1,245	<b>3.85</b>
Pharmacy Technicians	402	9.66%	31	5.69%	3,142	<b>3.83</b>
Psychiatric Technicians	393	6.69%	19	11.13%	818	<b>3.80</b>
Respiratory Therapists	418	4.85%	12	11.94%	1,950	<b>3.76</b>
Diagnostic Medical Sonographers	181	6.12%	7	13.64%	1,635	<b>3.76</b>
Occupational Therapy Assistants	139	5.74%	4	22.80%	1,378	<b>3.73</b>
Medical Secretaries and Administrative Assistants	886	2.79%	15	8.94%	8,097	<b>3.72</b>
Veterinary Technologists and Technicians	104	5.39%	3	19.07%	2,818	<b>3.72</b>

1) To understand demand trends without single-month outliers over-influencing the data, this calculation considers the average number of monthly job postings in each quarter, then provides the average value across those quarters.

# Labor Market Analysis (cont.)

Professionals Within These Occupations Should Encounter Strong Labor Markets

## Labor Market Data for High Demand Occupations in Favorable Industry Verticals

Regional Data

Occupation	Job Postings, 2020 Q1 - 2022 Q4			Employment, 2023-2033		Labor Market Score (Out of a maximum of 5)
	Avg. Monthly Job Postings Across Quarters <sup>1</sup>	Avg. Monthly Growth Across Quarters (Percent)	Avg. Quarterly Growth Across Quarters (Actual)	Projected Growth (Percent)	Projected Growth (Actual)	
<b>K-12 Education and Administration</b>						
Education Administrators, Postsecondary	1,925	7.06%	105	11.43%	1,664	<b>4.12</b>
Teachers and Instructors, All Other	309	8.98%	23	17.74%	1,550	<b>4.09</b>
Teaching Assistants, Except Postsecondary	1,108	3.96%	24	6.35%	12,594	<b>3.76</b>
Middle School Teachers, Except Special and Career/Technical Education	1,554	4.32%	35	5.17%	4,412	<b>3.69</b>
Elementary School Teachers, Except Special Education	768	3.36%	15	5.84%	10,230	<b>3.61</b>
Secondary School Teachers, Except Special and Career/Technical Education	739	3.90%	10	4.97%	7,822	<b>3.51</b>
Kindergarten Teachers, Except Special Education	85	14.47%	0	6.21%	982	<b>3.09</b>
<b>Operations Management</b>						
General and Operations Managers	7,103	3.51%	175	6.84%	27,364	<b>3.90</b>
Logisticians	1,151	2.01%	10	23.61%	4,920	<b>3.87</b>
Transportation, Storage, and Distribution Managers	1,607	3.02%	34	8.88%	1,380	<b>3.66</b>
<b>Mental Health and Human Services</b>						
Social and Community Service Managers	796	6.25%	45	13.04%	3,196	<b>4.10</b>
Social and Human Service Assistants	880	3.19%	26	10.55%	8,401	<b>3.86</b>
Community Health Workers	103	5.47%	2	14.28%	1,626	<b>3.51</b>

1) To understand demand trends without single-month outliers over-influencing the data, this calculation considers the average number of monthly job postings in each quarter, then provides the average value across those quarters.

# Appendix B: Project Methodology

---

Based on industry verticals provided by William Paterson University, EAB conducted an analysis to identify opportunities for new nondegree undergraduate-level program development.

All workforce demand data was collected from Lightcast, EAB's labor market intelligence partner.

## 1 Labor Market Analysis

---

### **Analyze regional labor market to identify high-demand occupations**

This analysis serves as an indicator of external labor market needs. The objective is to identify occupations with strong labor market demand, which serves as a proxy for adult student demand.

The analysis includes:

- Volume and growth of job postings
- Projected growth in employment

#### *Data collected and scoring methodology*

EAB analyzed labor market intelligence for the region and scored occupations (zero to five) based on growth and volume of job postings and employment.

EAB's analysis scored each occupation based on five discrete metrics:

Job Postings Data, 2020 Q1 - 2022 Q4:

- Average of monthly job postings across quarters
- Average monthly percent growth in job postings across quarters
- Average monthly actual growth in job postings across quarters

Employment Projections Data, 2023-2033:

- Projected growth in employment (actual)
- Projected growth in employment (percent)

Each occupation received a score of zero through five for each metric, based on its performance against all occupations considered. EAB then calculated a Labor Market Score (zero through five) for each occupation based on the average score for each metric.

## 2 Identify verticals

---

### **Map high demand occupations to verticals.**

Mapping of occupations is visualized on pages 7-12.

## 3 Identify Opportunities for New Non-Credit Undergraduate-Level Program Development

---

### **Analyze skills employers most highly demand within each industry vertical.**

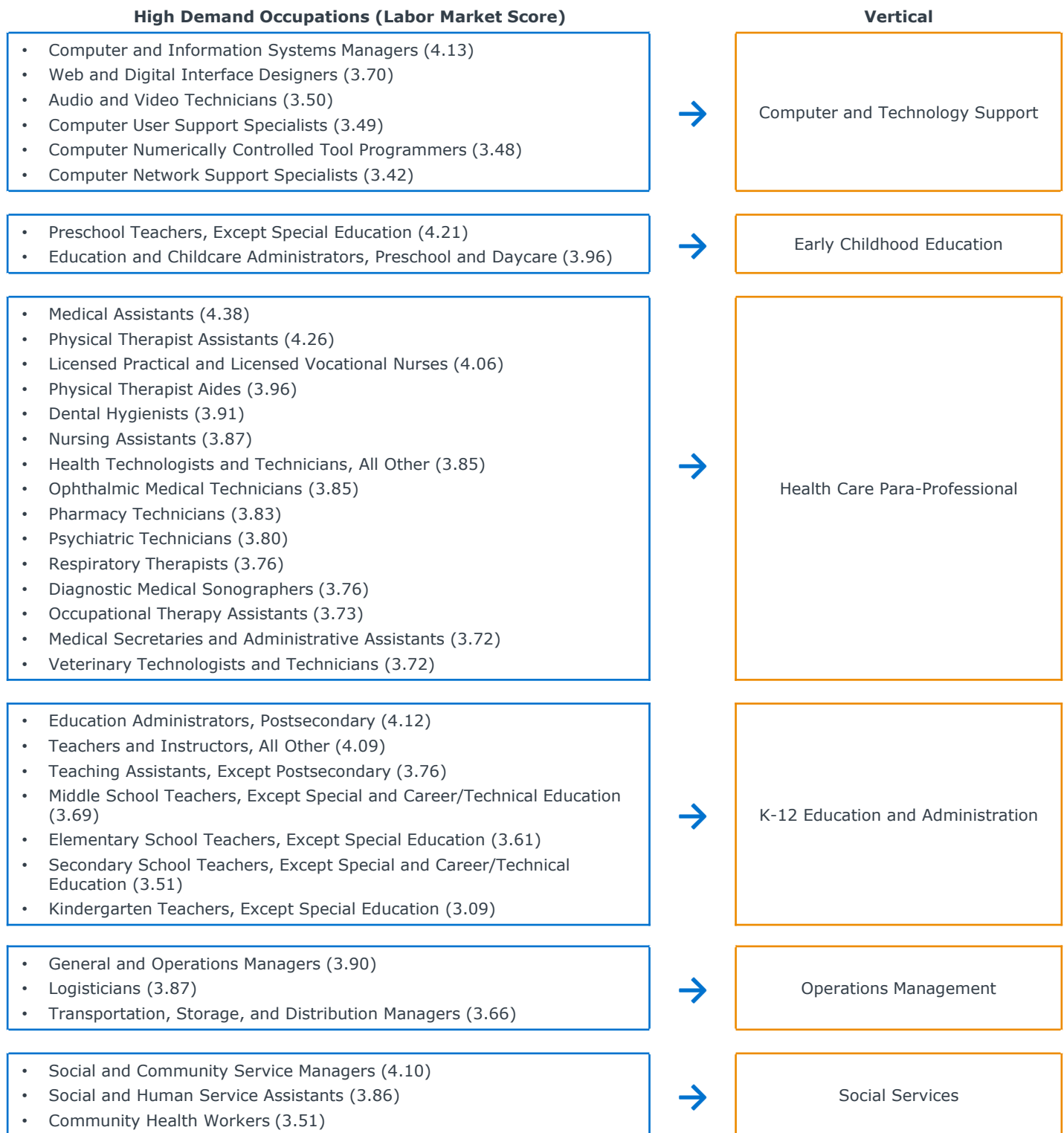
EAB developed skills scatterplots of the knowledge and skills requirements in job postings for professionals in high-demand occupations within the partner-selected industry verticals. High-demand occupations within each industry vertical are defined as the occupational groupings developed in step one of this report and visualized on the following pages. EAB used these skills scatterplots to identify in-demand fundamental and emerging skills within each vertical.

### **Cluster similar skills to identify opportunities for new program development.**

EAB grouped similar high-demand skills identified in the skills analysis to develop recommendations for new program development. EAB also considered the University's existing portfolio as well as the feasibility of the program topic as indicated by other institutions offering similar programs.

# Project Methodology (cont.)

In-demand occupations were then grouped into categories to identify in-demand verticals where William Paterson University may consider focusing their nondegree programming.



## Data Sources



**Lightcast**

**Lightcast**

<https://lightcast.io/>

This report includes data made available through EAB's partnership with Lightcast (formerly Emsi), a labor market analytics firm serving higher education, economic development, and industry leaders in the U.S., Canada, and the United Kingdom.

Lightcast curates and maintains the most comprehensive labor market data sets available for academic program planning, providing real-time job posting data, workforce and alumni outcomes data, and traditional government sources of data. Under this partnership, EAB may use Lightcast's proprietary Analyst™ and Alumni Insight™ tools to answer partner questions about employer demand, the competitive landscape, in-demand skills, postings versus actual hires, and skills gaps between job postings and professionals in the workforce. The Lightcast tools also provide EAB with in-depth access to unsuppressed, zip-code-level government data for occupations, industries, programs, and demographics. For more complete descriptions of the Lightcast tools, visit:

- <https://lightcast.io/solutions/education/analyst>
- <https://lightcast.io/solutions/education/alumni-pathways>

To learn more about Lightcast and its software and services, please contact Bob Hieronymus, Vice President of Business Development at [bob.hieronymus@lightcast.io](mailto:bob.hieronymus@lightcast.io).



**EAB**

**EAB Research and Insights Library**

<https://eab.com/research-and-insights/>



202-747-1000 | [eab.com](https://eab.com)

 @eab  @eab\_  @WeAreEAB  @eab.life

## ABOUT EAB

At EAB, our mission is to make education smarter and our communities stronger. We work with thousands of institutions to drive transformative change through data-driven insights and best-in-class capabilities. From kindergarten to college to career, EAB partners with leaders and practitioners to accelerate progress and drive results across five major areas: enrollment, student success, institutional strategy, data analytics, and diversity, equity, and inclusion (DEI). We work with each partner differently, tailoring our portfolio of research, technology, and marketing and enrollment solutions to meet the unique needs of every leadership team, as well as the students and employees they serve. Learn more at [eab.com](https://eab.com).