

Illinois State Board of Education

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James T. Meeks Chairman **Tony Smith, Ph.D.** *State Superintendent of Education*

MEMORANDUM

TO: The Honorable John J. Cullerton, Senate President

The Honorable Jim Durkin, House Minority Leader

The Honorable Michael J. Madigan, Speaker of the House

The Honorable Bill Brady, Senate Minority Leader

The Honorable Bruce Rauner, Governor

FROM: Tony Smith, Ph.D

State Superintendent of Education

DATE: July 2, 2018

SUBJECT: Illinois Agriculture Education Shortage Task Force Report

The Illinois Agriculture Education Shortage Task Force Report outlines research-based findings and recommendations pursuant to Public Act 100-0118. The primary charge of this task force is to issue a report that details how all Illinois students will have access to teachers of agriculture education, which is a current shortage area in the state, if these recommendations are adopted for legislation. Included in the report are findings, best practices, and funding recommendations to support these best practices.

The overarching concerns regarding the shortage tie back to agriculture education teacher recruitment and retention. Specific recommendations included in the report are categorized into one of these two areas and include the following:

Recruitment

- Suspend any plans to raise cut scores for Ed TPA, TAP test or any successor testing requirements, until shortage is no longer an issue;
- Remove unnecessary licensure burdens for teachers from other states who are seeking employment in Illinois:
- Create a pathway for middle grade agriculture education programs to become approved educator preparation programs and be eligible for funding, grants, and other resources;
- Explore the process of development of Ag Mag for Agriculture Education;
- Implement improved recruiting efforts (including providing incentives) to out-of-state agriculture education teachers to teach in Illinois;
- Incentivize attending a higher education institution in Illinois (rather than an out-of-state institution) to study agriculture education;
- Expand the National STAR Program to provide more funding for recruitment of high school students who have expressed an interest in an agriculture education career;
- Establish a recruitment mechanism in elementary school and middle school via existing agriculture education teachers;

- Tap into "undecided" majors at community colleges to promote a career in agriculture education;
- Elevate agriculture as a college-track program;
- Create alternative licensure pathways for career-changers;
- Modify current agriculture education endorsement requirements to be less burdensome; and
- Broaden state assignability requirements for career and technical education areas (including agriculture education); and
- Recognize agriculture courses as courses that meet requirements for high school graduation, college admission, and/or college graduation.

Retention

- Continue support and funding for the Three Circle (FFA and SAE) grant;
- Ensure every agriculture education classroom in the state has a paraprofessional or assistant to assist the teacher of record with classroom and extra-curricular duties;
- Ensure every new agriculture education teacher receives support via mentoring and classroom visits.
- Provide tax incentives for student teachers and early-career teachers; and
- Simply the application and reporting process to engage in State programs.

Other

- Allow qualification of all 5 pathways in career and technical education to be achieved with 2000 hours of work experience in agriculture;
- Revise the educator license with stipulations application wizard to allow for application of multiple endorsements under one fee; and
- Allow educators who are completing requirements for a professional educator license, and currently teaching on an educator license with stipulations, to utilize teaching evaluations of "proficient" or higher in lieu of specific program requirements (i.e. student teaching and/or the test of basic skills).

This report is transmitted on behalf of the chair of the Task Force, William E. Hook, who serves the principal of the Chicago High School for Agricultural Sciences. For additional copies of this report or for more specific information, please contact Emily Fox at 217-782-5262 or efox@isbe.net.

cc: Tim Anderson, Secretary of the Senate Timothy Mapes, Clerk of the House Legislative Research Unit State Government Report Center



Illinois Task Force on Agriculture Education Shortage

Final Reports and Recommendations

Prepared by the Members of the Illinois Agriculture Education Shortage Task Force

Respectfully Submitted to the Honorable Bruce Rauner, Governor, and to the Illinois General Assembly

Submitted pursuant to PA 100-0118 August 15, 2017 Table of Contents

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Illinois State Board of Education Illinois Agriculture Education Shortage Task Force

Final Report Submitted to the Honorable Bruce Rauner, Governor, and the Illinois General Assembly

2018

This report of the Illinois Agriculture Education Shortage Task Force is respectfully submitted to the Governor and the Illinois General Assembly.

Executive Summary

This report details both the findings and recommendations "to respond to the ongoing teacher shortage in agriculture education in Illinois" in accordance with the statutory authority provided in section (g) of Public Act 100-0118 and as required by the charge to this Task Force stipulated in section (f) of the same.

Findings

Findings collected by the Task Force are detailed as follows:

- A total of 44 educators left the field of Agriculture Education in the 2017-18 school year, while the projected number of graduates in Ag. Ed. For the same year is 41, which, while it would be double the number of 2017 graduates, still shows a net loss in classroom teachers (agriculturaleducation.org).
- Private corporations recruit many Ag. Ed. graduates away from teaching with higher salaries, better benefits, and a less negative image of retirement funds and pensions than the State of Illinois.
- Attraction of graduates from out-of-state colleges and universities is difficult because of factors such as Illinois' burdensome licensure requirements and job availability in those other states.
- Over the past five years, enrollment in Illinois middle school agriculture courses has risen, with almost 2,500 more students and more than 30 additional school districts involved, making middle (and even high) schools fertile recruiting grounds for future educators in those fields (agricultureeducation.org).
- State Teach Ag Results (STAR) grants of less than \$10,000 annually have been given to Illinois over the past several years. Those funds have provided a framework for further investment of time and private dollars to positively impact the recruitment and retention of agricultural educators.
- According to a 2015 USDA/Purdue University study, the number of available jobs in agricultural-related fields is growing faster than students are graduating with relevant degrees (<u>purdue.edu</u>)

- In general, agriculture courses are not considered vital components of college preparatory programs in middle and high schools. Additionally, such courses are commonly left off of college preparatory program guides.
- Illinois' licensure requirements have become burdensome and restrictive, especially when compared to such requirements in surrounding states, including licensure based on work experience in the industry, not just coursework at the college and university level.

Summary of Recommendations

- Implement improved recruitment efforts of agriculture graduates and educators to teach in Illinois through removal of unnecessary licensure burdens and suspension of any plans to raise cut scores for required testing until the shortage is no longer an issue.
- Incentivize choosing a higher education path in Illinois to study agriculture education and establish a pathway for middle grade education programs to become approved educator preparation programs, making them eligible for funding, grants, and additional resources.
- Establish a recruitment mechanism in elementary and middle schools that utilizes current classroom agriculture teachers as mentors.
- Expand Illinois' role in the National STAR program and employ funds in recruitment efforts of high school students with an interest in agricultural fields or agricultural education.
- Create partnerships with in-state community colleges to promote careers in agriculture education to students who are in an "undecided" status for their major.
- Elevate agriculture as a college-track program.
- Explore the development of Ag Mag for Agriculture Education as an awareness and recruitment tool for current and future educators.
- Continue support and funding of the Three Circle Grant and promote its existence to current agricultural educators.
- Ensure that new agriculture teachers receive support via mentoring and classroom visits and that all agriculture classrooms in the State of Illinois contain a licensed paraprofessional or assistant to support the teacher of record with classroom and extracurricular duties.
- Provide tax incentives for student and early-career agriculture teachers.

Expanded Descriptions of Recommendations

Recommendation 1: Implement More Streamlined Licensure Processes for Graduates and Educators

Standardized test scores have become an impediment for many prospective teacher candidates, especially with the inclusion of the TAP (Test of Academic Proficiency), the results of which show a low point of 25 years of data collection for graduates from Illinois universities in agriculture education (agricultureeducation.org), though that has been alleviated a bit with allowances for substitution of the ACT, SAT, super scoring, etc. Considering the fact that universities are given the latitude to accept standardized test scores as components for admission in a subjective manner, a third party qualification score is antiquated, costly, and cumbersome for both our aspiring young people and our institutions.

Not only do we support a suspension of increases to qualifying scores, we would encourage decreasing such scores, especially in the face of an educator shortage in a vital area such as Agriculture Education. On the state level, mandating additional tests at considerable costs to educators creates financial roadblocks which could make them reconsider their career choice to something outside of education (See Appendix C). We recommend a reconsideration of such requirements in an effort to assuage our state's current struggles and provide more opportunities in the pool of qualified candidates.

The current shortage of educators in Agriculture Education could benefit from a heavy concentration toward recruitment of educators coming from out of state. Illinois' licensure requirements can be burdensome, especially in comparison with equivalent certifications in other states. Various strategies could be employed to make a career teaching in Illinois more attractive including, but not limited to: allowing agriculture educators to qualify for teaching endorsements with work experience in addition to curriculum requirements; and utilizing proficiency ratings on previous evaluations to waive or replace other requirements for licensure. In making concessions such as these, Illinois may open itself up to more educators who are qualified and willing to make the transition from another state or geographic area.

It is also the recommendation of the task force to allow candidates for an Educator License with Stipulations endorsed in Career and Technical Education (ELS-CTE) in an agriculture area to be qualified to teach any agriculture pathway course provided they document 2,000 hours of work experience in agriculture. Also under consideration should be providing the option of allowing collegiate coursework as an alternative to the 2,000 hours of work experience in each pathway. The ELS application wizard could be revised to allow for the application of multiple endorsements/pathways under one fee. Finally, teachers with an ELS-CTE in agriculture could utilize "proficient" or higher evaluations in lieu of specific program requirements for a full PEL.

Finally, career changers who are choosing to move into education from another agriculture path face a number of hurdles to doing so, including additional coursework, testing, and student teaching requirements to receive their PEL. Such requirements are redundant, cumbersome, and costly for candidates who desire to teach full time and bring valuable experience and skills to students.

Recommendation 2: Begin Agriculture Education Pathways in Illinois Middle Schools

Statewide enrollment in 6th-8th grade agriculture courses has risen steadily in the recent past, with 100 plus school districts serving over 6,000 students, an increase of almost 2,500 students since 2011 (agricultureeducation.org). This illustrates the need for more educators in agricultural education, a growing pool of interest by adolescents in that realm, and an opportunity to expose more students to FFA and SAE programs.

It would be in the best interest of the State of Illinois to work in conjunction with Agricultural Education stakeholder groups to research and develop grant funding programs which are tailored to schools offering 6th-8th grade agriculture courses to develop resources in career skill development, service learning, and innovative curriculum. Such partnerships would not only be shoring up numbers of future agriculture educators, but also promoting working skills in agriculture, which makes up around 25% of all jobs in Illinois (<u>isbe.net</u>). Stakeholders can also institute incentives for their student members and promote the advantages and benefits of enrolling as an agricultural education major in Illinois.

The benefits of such programs have been revealed in several studies. Middle school students who have taken agriculture courses showed increased interest and competency in science, were more likely to participate in science-related activities outside of class, and were more likely to pursue science career options (eric.ed.gov).

In Illinois, middle school programs do not have access to the same ISBE resources as high school programs. Expanding this access will lead to an increased competency within students and alleviate stressors of recruitment to high school programs. Expanded agriculture programs in middle schools can fill a need for career exploration while elevating STEM education, especially considering middle schools have phased out career and technical exploration courses. Such expansions in class catalogs would increase the opportunities available for agriculture education teachers in more schools.

Recommendation 3: Utilize Agriculture Education Teachers as Student Mentors and In-State Higher Education Promoters

Studies have shown that no factor matters more in regards to student achievement than the teacher in the classroom. With that as a baseline, current and near-future agriculture education faculty can be an ideal resource for student achievement and retention in agriculture programs, and may even be the optimal mechanism for the promotion of in-state higher education. If the agriculture students of the next 5-10 years are in classrooms with teachers who have a wealth of content knowledge, are enthusiastic about their work, and embody the success that a degree from an Illinois school brings, the results could be numerous other teachers following the same path for years to come.

Building on teachers' connections to their subject areas and universities, opportunities abound to connect these middle and high school classrooms with those institutions. Programs, grants, and

scholarships can be established which would keep students on the path to staying in state and maybe even adding to the ranks of agriculture teachers.

Recommendation 4: Utilize the National STAR program to Its Fullest

The State Teach Ag Results (STAR) Grant has provided Illinois with an annual amount of around \$10,000 for the past several years. Those funds have provided a framework for further investment of time and private dollars to positively impact the recruitment and retention of agricultural educators. Illinois must continue to pursue STAR grant dollars and enhance its impact by securing additional amounts from private sources to improve Illinois' ability to continue to engage and keep educators.

Recommendation 5: Grow Partnerships with Illinois Community Colleges

In 2014, the College Board estimated that 25% of all full-time undergraduate students in the United States were enrolled in community colleges. National statistics in various studies have shown that as many as 50% of entering college students are undecided as to their majors (College Board). With those percentages in mind, Illinois' community college system could conceivably contain a large number of students would could be enticed to take up agricultural education. It would behoove the state to connect with registrar offices and students themselves regarding options in this area. Promoting agriculture education as a rewarding and fulfilling career choice to people who are unsure of their future vocation could reap enough dividends to alleviate the current shortage.

The agriculture education degree program is broad spectrum across the industry and this could prove to be a valuable recruiting ground. We believe that programs and materials should be created with this market focus of potential agricultural educators.

Recommendation 6: Elevate Agriculture as a College-Track Program

Elevating agriculture programs to the level of college-track would create a culture within schools that views such programs as equivalent in status to other more standard academic areas. A school culture which embraces agriculture as a vital class and trade (especially in the vastly more rural areas of the state) would likely see enrollment in such programs grow, creating momentum for students to stay in those programs into their years of higher education.

The USDA/Purdue study illustrates the fact that there is a shortage of agriculture graduates to fill our most pressing needs in the field. Middle and high schools, where students are beginning to focus their career identifications, do not consider agriculture courses as part of college preparatory programs. Taking steps to elevate agriculture courses to college preparatory in nature leads to increased recognition of agriculture career pathways, specifically amongst those with higher education aspirations.

Elevating agriculture to college preparatory utilizing dual credit has proven these positive results (<u>academia.edu</u>). In New Mexico, students taking a dual-enrollment course in agriculture improved their likelihood of staying in school, going to college, and pursuing agriculture.

Additionally, students receiving purposeful dual credit experienced greater success and were more likely to complete degrees (<u>jae-online.org</u>). Elevating agriculture as a college track program will increase student skill, the number of students pursuing agriculture degrees, teacher satisfaction and retention, and student interest in science-related fields as a whole.

Recommendation 7: Develop Ag Mag for Agriculture Education

The development of a publication which services Illinois Agriculture students and teachers could serve as a touchpoint for new ways of thinking, curriculum ideas, partnership growth, and awareness of the field itself. Educators could share articles about careers, partnerships and events by state agriculture groups (FFA, 4-H, etc.), and new techniques connected to their classroom learning. Such a publication would be a valuable and concentrated marketing tool that roots teachers and students in what they are learning in their classrooms.

Illinois Ag in the Classroom has created 27 such publications as part of the Ag in the Classroom program (agintheclassroom.org). Creating a similar themed "Ag Mag" would involve an investment of approximately \$10,000, with the result being a publication which could be utilized by literacy coordinators, teachers, and interested parties in school across Illinois. Inclusion of such a tool would insert agriculture education into a larger conversation about literacy, reading, and careers in agriculture.

Recommendation 8: Use and Promote the Three Circles Grant

The Three Circles Grant is valuable to agricultural educators, as it helps support their work outside of school hours working with students in activities such as FFA and 4-H. The state's first priority should be to promote its availability to current educators, a practice that could result in an elevated rate of retention, especially considering financial hardships brought on by teacher salaries. In addition, continuing and expanding the grant program would affect future educators and their affiliations with like-minded organizations.

The grant application process for agriculture education should be administered by the Head Consultant for agriculture education at ISBE as stated in the Illinois School Code (105 ILCS 5). There is currently within the State Board of Education an agricultural education unit to assist school districts in the establishment and maintenance of educational programs. Further, it is required that at least one consultant shall be responsible for the coordination of the State program, as Head Consultant. This task force's recommendation is that a clarification in statute should be inserted stating that there should be one full-time consultant, or Head Consultant, who dedicates 100% of his or her time to agriculture education.

Recommendation 9: Make Higher Levels of Classroom Support a Priority

Providing support to teachers, especially in their early years of teaching, is a vital component in the battle against burnout and attrition. Classroom responsibilities can be overwhelming depending on many variables. Consideration should be given to making sure that agriculture education teachers have a Paraprofessional teacher or assistant in the classroom with them to alleviate some of the responsibilities that come with their daily work. In addition, mentoring and

classroom visits from administrators or senior teachers should become the norm to give these teachers the guidance and help that they need to become long-term professionals in the Ag. Ed. classroom. Mentoring supports are tremendously beneficial to the growth and development of early career teachers. Stressors and burnout can often be mitigated through mentoring and assistance programs.

Agriculture educators are often required to fill many roles in addition to teaching, including bookkeeper, compliance officer, greenhouse manager, grant writer, farm manager, bus driver, fundraiser, hoof trimmer, graphic designer, salesman, and more. The opportunity to have some of these responsibilities performed by individuals possessing skills other than those required for teachers would provide the support needed to allow teachers to focus on working with students and where individual skill sets best place them. This would provide relief and address a teacher retention issue of becoming overwhelmed with requirements and expectations of the position. Agriculture education teachers often have multiple education spaces that require specialization such as greenhouses, crop plots, farms, welding labs, and more. States like Florida, Texas, and Oklahoma have examples of farm managers and greenhouse operators to assist the agriculture education teacher and elevate the students' education and experience altogether. Such an arrangement would also enable teachers to miss fewer days of school with a qualified support person taking students to outside events.

Recommendation 10: Provide Tax Incentives for Student and Early-Career Teachers

In order to recruit and retain agriculture teachers in Illinois, the task force recommends the development of incentives for teachers to stay in the profession. Under consideration should be:

- the reduction or elimination of state income taxes for teachers who have been in the profession for more than six years
- state income tax credit to reduce income subject to tax in the amount that the teacher spends on post-graduate tuition and other educational expenses (up to \$7,500)

Appendix A: References Cited in This Report

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Agriculture, Renewable Natural Resources, and the Environment."

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Appendix B: Task Force Members



ISBE Agricultural Education Shortage Task Force 2017

Scott Bennett

State Senator 52nd District

Avery Bourne

State Representative 95th District

Jerry Costello

State Representative 116th District

Megan Coy

Program Advisor Facilitating Coordination in Agricultural Education

Mike Doyle

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State Coordinator Facilitating Coordination in Agricultural Education

Dr. Jay Solomonson

Director of Career & Technical Education/Ag Instructor Orion High School

Scott Vogler

Board President West Prairie S.D. 103

Appendix C: Testing Requirements and Costs

TEST	SOURCE	WHO	PASSING SCORE	COMMENTS
		DETERMINES		
		PASSING		
		SCORE		
ACT	ACT	ISBE (or other	22 composite; 6 on	Exam is taken at no
		governing body)	writing	cost to students
				during junior year of high school; every
				retake costs \$62.50
				per exam (w/writing
				requirement).
SAT	CollegeBoard	ISBE (or other	SAT combined score	\$60 per exam
		governing body)	(evidence-based	1
			reading and writing	
			plus mathematics) of	
			at least 1110 and a minimum score of 26	
			on writing and	
			language test for tests	
			taken on or after	
			March 5, 2016.	
TAP (Test of	Illinois	ISBE (or other	240 per subset	All four subsets:
Academic	Licensure	governing body)	1	\$113
Proficiency)	Testing System			One subset: \$68
(i.e., Basic	(ILTS) and			
Skills test)	Pearson			
A ~	Education, Inc. Illinois	ICDE (on other	240	\$122
Agriculture Education	Licensure	ISBE (or other governing body)	240	\$122 per exam
(content test)	Testing System	governing body)		
(content test)	(ILTS) and			
	Pearson			
	Education, Inc.			
Content area	Illinois	ISBE (or other	240	\$122 per exam
endorsement	Licensure	governing body)		
tests (optional)	Testing System			
	(ILTS) and			
	Pearson Education, Inc.			
edTPA	Pearson	ISBE (or other	37 (out of 75)	\$300
Call A	Education, Inc.	governing body)	37 (Out OI 73)	φυσυ
		55 (Siming 60dg)		