

# **Meeting Mathematics and Science Teacher Shortages in Missouri**

## **Elements of Supportive Induction for New Teachers**

**Gayle Wilkinson, Ed.D.**

**University of Missouri-St. Louis**

# Reasons for Induction

- **Teacher quality is a factor for raising student achievement (Darling Hammond, 1997)**
- **50% new teachers leave within five years of being hired (NEA, 2001)**
- **Districts with teacher induction programs retain well-qualified teachers (Archer, 1999, Brewster & Railstock, 2001)**
- **Induction renews experienced teachers**

# Quality Induction

- 1. Program Vision – recognize the importance of teacher induction beyond surviving to building professionalism all among teachers**
- 2. Institutional Commitment and Support – time, resources and teacher union support**
- 3. Quality Mentoring – carefully selected, adequately educated in the mentoring process**

**4. Professional Standards – supportive, but focused on teacher learning and skill development**

**5. Classroom-Based Teacher Learning – ample time for classroom observation and feedback by the mentor in the teacher’s own classroom**

**Moir, E. Glass, J. (2005). Quality induction: An investment in teachers. Santa Cruz, CA: New Teacher Center**

# **National Study**

- 1. View induction as a multi-year developmental process**
- 2. Ensure that school administrators understand the need for an orientation, a supportive environment and working conditions**
- 3. Provide a first-class mentoring program**

- 4. Link inductee evaluation to district and state teaching standards**
- 5. Invest in technology to facilitate communication with all involved**
- 6. Evaluate induction program effectiveness**

**Fideler, E. & Haselkorn, D. (1999). Learning the Ropes: Urban Teacher Induction Programs and Practices in the United States. Belmont, MA: Recruiting New Teachers, Inc**

# **Four Urban Induction Programs**

**City 1: Paid mentor team, union support,  
release time, state funded**

**City 2: Paid mentors, release time  
state funded**

**City 3: Paid mentor team, release time,  
state funded**

**City 4: Volunteers, no release time,  
district funded**

City	Attended Orientation		Orientation Information			
	District	School	New Teacher Manual	Printed School Rules	Adequate Info. on Rules	Principal's Expectation
1	85	52		61	58	43
2	94	56		73	70	73
3	65	48	88	59	50	41
4	90	55	60	54	51	59
By	Per cent	N=825				

City	Assigned Mentor		Mentor Type			
	Yes	No	District	Building	Same Grade Level	Same License
1	84	15	67	18	8	23
2	81	17	23	65	20	29
3	97	2	67	34	1	24
4	93	4	9	47	35	29
By	percent N=825					

City	Observed Teaching					
	Weekly	Bi-weekly	Monthly	Quarterly	Once per semester	Never
1	79	14	0	0	0	5
2	3	4	13	26	35	3
3	7	15	21	17	28	6
4	20	0	5	0	21	39
Whole	42	13	12	14	12	8

# Impact of formal assessment on teaching by per cent

N = 825

	None	Some	Much	A lot
Teaching Content	10	56	27	7
Instructional practice	7	56	28	9
Assessment practices	17	56	21	5
Meeting student needs	8	50	38	8
Teaching Confidence	13	39	33	14

# Perceptions of formal induction practices

Assistance with supplies and materials by per cent

City	Access to Supplies	Adequate Resources	Help Finding Materials
1	82	66	91
2	93	79	97
3	76	51	81
4	74	43	81

## Impact of professional development plan by per cent

	None	Some	Much	A lot
Teaching Content	29	49	17	5
Instructional practice	22	48	22	8
Assessment practices	30	47	17	6
Meeting student needs	25	44	23	8
Teaching Confidence	28	42	21	9

## District workshops specifically for new teachers

N=825

<b>City</b>	<b>Not Useful</b>	<b>Useful</b>	<b>Very Useful</b>	<b>Not Available</b>
<b>1</b>	<b>11</b>	<b>46</b>	<b>17</b>	<b>27</b>
<b>2</b>	<b>30</b>	<b>53</b>	<b>13</b>	<b>4</b>
<b>3</b>	<b>36</b>	<b>44</b>	<b>11</b>	<b>9</b>
<b>4</b>	<b>26</b>	<b>33</b>	<b>24</b>	<b>17</b>

Meeting with other new teachers in structured activities.

<b>City</b>	<b>Not Useful</b>	<b>Useful</b>	<b>Very Useful</b>	<b>Not Available</b>
<b>1</b>	<b>9</b>	<b>41</b>	<b>18</b>	<b>32</b>
<b>2</b>	<b>18</b>	<b>49</b>	<b>15</b>	<b>18</b>
<b>3</b>	<b>17</b>	<b>47</b>	<b>14</b>	<b>22</b>
<b>4</b>	<b>7</b>	<b>37</b>	<b>27</b>	<b>29</b>

## Meeting with principal or other administrators

<b>City</b>	<b>Not Useful</b>	<b>Useful</b>	<b>Very Useful</b>	<b>Not Available</b>
<b>1</b>	<b>18</b>	<b>48</b>	<b>14</b>	<b>24</b>
<b>2</b>	<b>9</b>	<b>63</b>	<b>12</b>	<b>17</b>
<b>3</b>	<b>10</b>	<b>50</b>	<b>16</b>	<b>25</b>
<b>4</b>	<b>15</b>	<b>56</b>	<b>17</b>	<b>12</b>

*Conversations with other new teachers*

<b>City</b>	<b>Not Useful</b>	<b>Useful</b>	<b>Very Useful</b>	<b>Not Available</b>
<b>1</b>	<b>2</b>	<b>47</b>	<b>41</b>	<b>10</b>
<b>2</b>	<b>5</b>	<b>47</b>	<b>39</b>	<b>8</b>
<b>3</b>	<b>6</b>	<b>42</b>	<b>42</b>	<b>10</b>
<b>4</b>	<b>0</b>	<b>50</b>	<b>41</b>	<b>10</b>

## Extent professional development affected instruction

<b>City</b>	<b>None</b>	<b>Some</b>	<b>Much</b>	<b>A lot</b>
<b>1</b>	<b>8</b>	<b>55</b>	<b>27</b>	<b>10</b>
<b>2</b>	<b>3</b>	<b>51</b>	<b>37</b>	<b>9</b>
<b>3</b>	<b>9</b>	<b>65</b>	<b>20</b>	<b>6</b>
<b>4</b>	<b>12</b>	<b>52</b>	<b>29</b>	<b>7</b>

## Extent professional development affected level of confidence

<b>City</b>	<b>None</b>	<b>Some</b>	<b>Much</b>	<b>A lot</b>
<b>1</b>	<b>11</b>	<b>37</b>	<b>37</b>	<b>16</b>
<b>2</b>	<b>11</b>	<b>48</b>	<b>29</b>	<b>13</b>
<b>3</b>	<b>17</b>	<b>43</b>	<b>28</b>	<b>13</b>
<b>4</b>	<b>24</b>	<b>24</b>	<b>36</b>	<b>17</b>

## Mentoring affected instructional practice

<b>City</b>	<b>None</b>	<b>Some</b>	<b>Much</b>	<b>A lot</b>
<b>1</b>	<b>10</b>	<b>43</b>	<b>30</b>	<b>17</b>
<b>2</b>	<b>9</b>	<b>34</b>	<b>41</b>	<b>15</b>
<b>3</b>	<b>17</b>	<b>60</b>	<b>14</b>	<b>9</b>
<b>4</b>	<b>38</b>	<b>49</b>	<b>10</b>	<b>13</b>

## Mentoring affected level of confidence

<b>City</b>	<b>None</b>	<b>Some</b>	<b>Much</b>	<b>A lot</b>
<b>1</b>	<b>11</b>	<b>22</b>	<b>33</b>	<b>35</b>
<b>2</b>	<b>16</b>	<b>30</b>	<b>33</b>	<b>21</b>
<b>3</b>	<b>21</b>	<b>34</b>	<b>22</b>	<b>24</b>
<b>4</b>	<b>41</b>	<b>23</b>	<b>21</b>	<b>15</b>

## Assisted with discipline problems

<b>City</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Frequently</b>	<b>Always</b>
<b>1</b>	<b>28</b>	<b>44</b>	<b>21</b>	<b>6</b>
<b>2</b>	<b>16</b>	<b>40</b>	<b>32</b>	<b>12</b>
<b>3</b>	<b>37</b>	<b>39</b>	<b>21</b>	<b>4</b>
<b>4</b>	<b>50</b>	<b>29</b>	<b>17</b>	<b>5</b>

# Conclusions

- **Correlation between amount of induction support and positive impact on new teachers**
- **New teachers do not value all elements of inductions programs**
- **Individual teachers need specific support**
- **Mentors have the greatest effect on new teachers**